**Table S1.** Study characteristics and prevalence of endometrial cancer in premenopausal women

|                                       | Country            | Country       | Country Design Popuulation                         | Popuulation                                      | Outcome measure | Premenopausal<br>women |  |
|---------------------------------------|--------------------|---------------|--|--|-----------------|------------------------|--|
|                                       |                    |               |  |  | EC (%)          | N                      |  |
| Akkad 1995 <sup>23</sup>              | UK                 | Retrospective | Pre and post menopausal women investigated for AUB | Diagnostic hysteroscopy                          | 0 (0)           | 92                     |  |
| Alexopoulos<br>1999 <sup>24</sup>     | UK                 | Retrospective | Pre and post menopausal women investigated for AUB | Hysteroscopy, sometimes with biopsy              | 3 (0.17)        | 1,719                  |  |
| Allen 1990 <sup>25</sup>              | Tasmania           | Retrospective | Pre and post menopausal women investigated for AUB | D&C, sometimes with hysteroscopy                 | 4 (0.11)        | 3,780                  |  |
| Ash 1996 <sup>26</sup>                | Canada             | Retrospective | Premenopausal women investigated for AUB           | Endometrial biopsy                               | 0 (0)           | 310                    |  |
| Bain 2002 <sup>27</sup>               | UK                 | Prospective   | Premenopausal women investigated for AUB           | Endometrial biopsy with/<br>without hysteroscopy | 0 (0)           | 349                    |  |
| Bronz 1997 <sup>28</sup>              | Switzerland        | Prospective   | Premenopausal women investigated for AUB           | TVS, SCHS and diagnostic hysteroscopy            | 0 (0)           | 83                     |  |
| Chawla 2014 <sup>29</sup>             | India              | Prospective   | Pre and post menopausal women investigated for AUB | TVS, SIS and hysteroscopy with biopsy            | 0 (0)           | 29                     |  |
| Clevenger-Hoeft<br>1999 <sup>30</sup> | USA                | Retrospective | Premenopausal women investigated for AUB           | Sonohysterography, where indicated, biopsy       | 0 (0)           | 80                     |  |
| Crtichley 2004 <sup>31</sup>          | UK                 | Prospective   | Pre and post menopausal women investigated for AUB | Endometrial biopsy                               | 3 (0.62)        | 483                    |  |
| Damle 2013 <sup>32</sup>              | India              | Retrospective | Pre and post menopausal women investigated for AUB | endometrial sampling                             | 0 (0)           | 80                     |  |
| Dangal 2003 <sup>33</sup>             | Nepal              | Retrospective | Pre and post menopausal women investigated for AUB | D&C and endometrial biopsy                       | 0 (0)           | 39                     |  |
| De Angelis 2013 <sup>34</sup>         | Italy              | Prospective   | Premenopausal women investigated for HMB           | Office hysteroscopy                              | 1 (0.85)        | 118                    |  |
| De Kroon 2004 <sup>35</sup>           | The<br>Netherlands | Prospective   | Pre and post menopausal women investigated for AUB | Sugical hysteroscopy                             | 0 (0)           | 41                     |  |
| de Vries 2000 <sup>36</sup>           | The<br>Netherlands | Prospective   | Premenopausal women investigated for AUB           | Hysteroscopy and endometrial biopsy              | 0 (0)           | 62                     |  |

| Decloedt 1999 <sup>37</sup>     | UK                 | Retrospective | Pre and post menopausal women investigated for AUB | Hysteroscopy with biopsy where indicated              | 2 (0.43)     | 469   |
|---------------------------------|--------------------|---------------|--|---|--------------|-------|
| Dreisler 2009 <sup>38</sup>     | Denmark            | Prospective   | Women from the Danish Civil Registration System    | TVS, SCSH, hysteroscopic resection where indicated    | 1 (0.50)     | 199   |
| Dueholm 2001 <sup>14</sup>      | Denmark            | Prospective   | Premenopausal women investigated for AUB           | SCSH, TVS, operative hysteroscopy where indicated     | 0 (0)        | 452   |
| Dunn 2001 <sup>39</sup>         | USA                | Prospective   | Pre and post menopausal women investigated for AUB | Risk-stratified pathway, including endometrial biopsy | 0 (0)        | 570   |
| Emanuel 1995 <sup>40</sup>      | The<br>Netherlands | Retrospective | Pre and post menopausal women investigated for AUB | Diagnostic hysteroscopy                               | 4 (0.44)     | 908   |
| Emmanuel<br>1995b <sup>41</sup> | The<br>Netherlands | Retrospective | Pre and post menopausal women investigated for AUB | TVS and diagnostic hysteroscopy                       | 0 (0)        | 213   |
| Erdem 2007 <sup>42</sup>        | Turkey             | Prospective   | Pre and post menopausal women investigated for AUB | TVS and SIS   | 0 (0)        | 95    |
| Esmer 2014 <sup>43</sup>        | Turkey             | Retrospective | Premenopausal women investigated for AUB           | Endometrial biopsy                                    | 16<br>(0.64) | 2,516 |
| Fakhar 2008 <sup>44</sup>       | Pakistan           | Prospective   | Pre and post menopausal women investigated for AUB | Pipelle biopsy followed by D&C                        | 0 (0)        | 89    |
| Farquhar 1999 <sup>45</sup>     | New Zealand        | Retrospective | Premenopausal women with AUB undergoing            | Endometrial biopsy                                    | 5 (0.48)     | 1,033 |
| Fraser 1992 <sup>46</sup>       | Australia          | Retrospective | Premenopausal women investigated for HMB           | Some had hysteroscopy                                 | 0 (0)        | 316   |
| Getpook 2006 <sup>47</sup>      | Thailand           | Prospective   | Premenopausal women investigated for IMB           | Uterine curettage                                     | 4 (3.6)      | 111   |
| Goldstein 1997 <sup>48</sup>    | USA                | Retrospective | Premenopausal women investigated for AUB           | Ultrasound. Biopsy or D&C in some cases               | 0 (0)        | 433   |
| Gorleo 2008 <sup>49</sup>       | Italy              | Prospective   | Premenopausal women investigated for AUB           | TVS and SCHS  | 0 (0)        | 61    |
| Goyal 2015 <sup>50</sup>        | India              | Prospective   | Premenopausal women investigated for AUB           | TVS and diagnostic hysteroscopy                       | 0 (0)        | 100   |
| Gulumser 2010 <sup>51</sup>     | UK                 | Retrospective | Pre and post menopausal women investigated for AUB | Hysteroscopy, biopsy in most cases                    | 4 (0.90)     | 446   |
| Hammouda                        | Saudi Arabia       | Retrospective | Pre and Peri menopausal                            | Curettage, biopsy or                                  | 4 (0.61)     | 660   |

| 1967 <sup>52</sup><br>Hauge 2010 <sup>53</sup> | Norway   | Prospective   | women investigated for AUB<br>Pre-menopausal women<br>investigated for AUB<br>refractory to medical<br>treatment | hysterectomy<br>TVS, SIS and hysteroscopy with<br>biopsy | 0 (0)        | 104   |
|--|----------|---------------|--|--|--------------|-------|
| Hunter 2001 <sup>54</sup>                      | UK       | Retrospective | Pre and post menopausal women investigated for AUB   | Hysteroscopy and biopsy                                  | 0 (0)        | 57    |
| Iram 2010 <sup>9</sup>                         | UK       | Retrospective | Premenopausal women investigated for AUB   | Endometrial biopsy                                       | 20<br>(0.67) | 3,006 |
| Jetley 2013 <sup>55</sup>                      | India    | Retrospective | Perimenopausal women investigated for AUB  | Endometrial biopsy                                       | 0 (0)        | 219   |
| Litta 1996 <sup>56</sup>                       | Italy    | Retrospective | Pre and post menopausal women investigated for persistent AUB  | Hysteroscopy and biopsy                                  | 6 (1.59)     | 378   |
| Loffer 1989 <sup>57</sup>                      | USA      | Retrospective | Pre and post menopausal women investigated for AUB   | Endometrial biopsy                                       | 0 (0)        | 140   |
| MacKenzie 1978 <sup>58</sup>                   | UK       | Retrospective | Pre and post menopausal women investigated for AUB   | D&C  | 0 (0)        | 580   |
| Machado 2005 <sup>59</sup>                     | Oman     | Prospective   | Pre and post menopausal women investigated for AUB   | TVS, hysteroscopy and endometrial biopsy                 | 0 (0)        | 134   |
| Masood 2015 <sup>60</sup>                      | Pakistan | Prospective   | Pre and post menopausal women investigated for AUB   | Endometrial biopsy                                       | 1 (1.92)     | 52    |
| Matthew 2010 <sup>61</sup>                     | Oman     | Retrospective | Pre and post menopausal women investigated for AUB   | TVS, SISH and diagnostic hysteroscopy                    | 0 (0)        | 54    |
| Mortakis 1997 <sup>62</sup>                    | Greece   | Prospective   | Pre and post menopausal women investigated for AUB   | TVS with aspiration pipelle biopsy                       | 1 (0.82)     | 122   |
| Motashaw 1990 <sup>16</sup>                    | India    | Retrospective | Pre and post menopausal women investigated for AUB   | Diagnostic hysteroscopy                                  | 1 (0.30)     | 328   |
| Mukhopadhayay<br>2007 <sup>63</sup>            | India    | Retrospective | Perimenopausal women investigated for AUB  | TVS and hysteroscopy with biopsy                         | 0 (0)        | 85    |
| Nagele 1996 <sup>17</sup>                      | UK       | Retrospective | Pre and post menopausal women investigated for AUB   | Diagnostic hysteroscopy                                  | 4 (0.21)     | 1,925 |
| Ossola 1999 <sup>64</sup>                      | Italy    | Retrospective | Pre and post menopausal  | TVS and diagnostic                                       | 0 (0)        | 33    |

|   |              |               | women investigated for AUB                         | hysteroscopy                                 |          |     |
|---|--------------|---------------|--|--|----------|-----|
| Paschopoulos  | Greece       | Retrospective | Pre and post menopausal                            | According to protocol (including             | 2 (0.63) | 316 |
| 2001 <sup>65</sup>                                  |              |               | women investigated for AUB                         | TVS, hysteroscopy and biopsy)                |          |     |
| Refaie 2005 <sup>66</sup>                           | UK           | Retrospective | Pre and post menopausal                            | Outpatient hysteroscopy and                  | 0 (0)    | 68  |
| C - I - C 204 415                                   | D. I. Salana | D             | women investigated for AUB                         | pipelle biopsy                               | 0 (0)    | 70  |
| Sadaf 2014 <sup>15</sup>                            | Pakistan     | Prospective   | Pre and post menopausal women investigated for AUB | D&C  | 0 (0)    | 79  |
|   |              |               | after failed medical                               |  |          |     |
|   |              |               | management   |  |          |     |
| Shaheen 2005 <sup>67</sup>                          | Pakistan     | Prospective   | Premenopausal women                                | D&C  | 1 (0.83) | 121 |
|   |              |               | investigated for HMB                               |  |          |     |
| Soleymani 2014 <sup>68</sup>                        | Iran         | Retrospective | Pre and post menopausal                            | D&C  | 2 (0.42) | 480 |
| o   |              |               | women investigated for AUB                         |  | 0 (0)    |     |
| Stamatellos<br>2005 <sup>69</sup>                   | Greece       | Retrospective | Perimenopausal women using of HRT investigated for | Endometrial biopsy                           | 0 (0)    | 76  |
| 2005**  |              |               | AUB  |  |          |     |
| Subhankar 2011 <sup>70</sup>                        | India        | Prospective   | Premenopausal women                                | Hysteroscopy and endometrial                 | 0 (0)    | 252 |
|   |              | •             | investigated for AUB                               | biopsy                                       | ( )      |     |
| Svirsky 2008 <sup>71</sup>                          | Israel       | Retrospective | Premenopausal women                                | Hysteroscopy and endometrial                 | 0 (0)    | 218 |
|   |              |               | investigated for AUB                               | biopsy                                       |          |     |
| Tehranian 2015 <sup>72</sup>                        | Iran         | Prospective   | Premenopausal women                                | SCHS, hysteroscopy and                       | 0 (0)    | 90  |
| Tamaian 1007 <sup>73</sup>                          | Consin       | Dotugopostivo | investigated for AUB                               | endometrial biopsy                           | 4 (0 50) | 002 |
| Torrejon 1997 <sup>73</sup>                         | Spain        | Retrospective | Pre and post menopausal women investigated for AUB | Diagnostic hysteroscopy and D&C              | 4 (0.50) | 802 |
| Vale 1981 <sup>74</sup>                             | USA          | Retrospective | Pre and post menopausal                            | Hysteroscopy and D&C                         | 0 (0)    | 419 |
|   |              |               | women investigated for AUB                         | ,  | - (-7    |     |
| Van den Bosch                                       | UK           | Prospective   | Pre and post menopausal                            | TVS and SIS                                  | 1 (0.13) | 763 |
| 2015 <sup>75</sup>                                  |              |               | women investigated for AUB                         |  |          |     |
| Van Trotseburg                                      | Austria      | Retrospective | Premenopausal women                                | Hysteroscopy, biopsy where                   | 0 (0)    | 317 |
| 2000 <sup>76</sup><br>Vercellini 1997 <sup>77</sup> | I+oly        | Dotrochostivo | investigated for AUB                               | indicated                                    | 2 (0.26) | 770 |
| verceiiiii 1997                                     | Italy        | Retrospective | Premenopausal women investigated for HMB           | TVS and hysteroscopy with endometrial biopsy | 2 (0.26) | 770 |
| Vercellini 1998 <sup>78</sup>                       | Italy        | Retrospective | Premenopausal women                                | TVS and biopsy                               | 0 (0)    | 102 |
| <del>-</del>  | ,            |               |  |  | V = 7    | -   |

|                              |          |               | investigated for HMB       |                                |          |    |
|------------------------------|----------|---------------|----------------------------|--------------------------------|----------|----|
| Yavuz 2012 <sup>79</sup>     | Turkey   | Retrospective | Pre and post menopausal    | TVS, endometrial sampling and  | 0 (0)    | 52 |
|                              |          |               | women investigated for AUB | curettage                      |          |    |
| Yildizhan 2008 <sup>80</sup> | Turkey   | Prospective   | Pre and post menopausal    | TVS, SIS and D&C, hysteroscopy | 0 (0)    | 79 |
|                              |          |               | women investigated for AUB | or hysterectomy                |          |    |
| Yumru 2009 <sup>81</sup>     | Turkey   | Prospective   | Pre and post menopausal    | TVS, D&C and hysteroscopy      | 0 (0)    | 75 |
|                              |          |               | women investigated for AUB |                                |          |    |
| Zaman 2013 <sup>82</sup>     | Pakistan | Prospective   | Pre and post menopausal    | Pipelle biopsy                 | 1 (1.92) | 52 |
|                              |          |               | women investigated for AUB |                                |          |    |

<sup>\*</sup>Or other measure if mean was not available. For studies only reporting the age of mixed populations of pre and post-menopausal women, where the age of the pre-menopausal subgroup was not available NR (not reported) is stated.

AUB=abnormal uterine bleeding; D&C=dilation and curettage; HMB=heavy menstrual bleeding; IMB=intermenstrual bleeding; MP=menopausal;

TVS=Transvaginal sonography; SCHS=saline contrast hysterosonography; SIS=Saline infusion sonography